

How to Make a Stop Animation

1. Make sure you have a digital camera with lots of memory and a computer with either iMovie (Mac) or Windows Movie Maker (PC).
2. Think of an idea for your animation. What story are you trying to tell? How are your characters going to move? Are they going to be raising their hand, nodding, walking? Once you have a story written it helps to sketch out the actions of your characters in a storyboard.
3. Gather the objects and figures that you want to use in your movie. Some easy objects to find are clay, wire, Legos, blocks, coins, etc. Use your imagination. Almost anything will work. Create a set that will compliment your story.
4. Set up characters in your planned position on your set.
5. Place your camera in front of your set. Make sure that your camera is supported in place so that it doesn't shake or move as you take photos. If the camera moves, it will lack the continuity that it needs for a successful stop motion. Keep in mind the more photos you take the smoother the stop motion.
6. It is important to set up good steady lighting that won't change from each photo frame.
7. Take a couple photos of the figure in the starting position.
8. Begin the movement sequence. The key to a successful stop motion is to move your figures with very small movements and take a photo after every movement.
9. Repeat the movement sequence until your action is completed.
10. Save the photos onto your computer.
11. Use your movie making software.

iMovie/iLife

1. Import your photos to iPhoto. Create an album with a specific scene/movie name and drag the pictures into it.
2. Open iMovie and click "File", then "Create New Project".
3. Click on the "Photos Browser" button at the lower right to show the photo library.
4. Choose the album you created from the drop-down menu, and drag it into the timeline in the upper left part of the screen.
5. Click Edit, then "Select All".
6. While all photos are selected, hover over the first photo and click the 3rd button that appears along the left side (looks like a wheel). Click "Cropping, Ken Burns, and Rotation". Make sure "Fit" is selected, then click "Done".
7. Again, while all photos are selected, hover over the 1st photo and click the same button, then "Clip Adjustments". Under duration, type 0.1s and select "Apply to all stills" then click "Done". This controls the seconds per frame.
8. Add titles and credits and audio if desired.
9. Convert movie to QuickTime. To do this, look for the "Share" and "Export" options. Try one of the defaults.

Windows Movie Maker

1. Open Windows Movie Maker
2. Import photos
3. Click "Tools", then "Options". Do this before placing the photos in the timeline.
4. Click the "Advanced" tab.
5. Under picture options, change the picture duration to 0.125 seconds a frame (the lowest setting).
6. Make sure your photos are in the correct order.
7. Load the photos into the storyboard.
8. Add titles and credits and audio if desired.
9. Go to "Finish Movie" and click whichever option is suitable.

Helpful links for Learning Stop Animation

Stop Animation How to Instructions

Step by step directions on how to make your own stop animation.
<http://www.wikihow.com/Create-a-Stop-Motion-Animation>

A high school teacher takes you step by step through the stop motion process.
http://blogs.adobe.com/educationleaders/2009/08/integrate_with_stop_motion.html

Examples of Educational Stop Animations

A Second grade class creates a stop animation about penguins.
http://fc.unity.k12.wi.us/~greg_paulsen/index.htm

Stop motion of the water cycle done by a primary school class
<http://www.youtube.com/watch?v=fpVFZj4Krlc>

Watch stop animations done by high schools students in science, history, and math.
http://www.mountsihighschool.com/directory/_dockeryj/conferences/storytelling/example_stopmotion.html

Examples of Early Stop Animations

J. Stuart Blackton's *Humorous Phases of Funny Faces* (1906)
<http://www.youtube.com/watch?v=wGh6maN4l2I>

Emile Cohl *Fantasmagorie* (1908)
<http://www.youtube.com/watch?v=aEAObel8yIE>

Lotte Reiniger the first women animator. This is her animation of Hansel and Gretel
<http://www.youtube.com/watch?v=KxklGXVwZTM>

Free Stop Motion Software

Stop Motion Animator is made to run on PCs.
http://www.clayanimator.com/english/stop_motion_animator.html

Monkey Jam, a program for PCs, is designed to let you capture images from a webcam, camcorder, or scanner and assemble them as separate frames of an animation.
<http://www.giantscreamingrobotmonkeys.com/monkeyjam/about.html>

AnimAid is stop animation software for Macs.
<http://www.macupdate.com/info.php/id/19797/animaide-xt>

Pay Stop Motion Software

iStopMotion2 has a free 5 day trial and special education pricing. Can be used with PCs or Macs.
<http://www.boinx.com/istopmotion/overview/>

Frames 4 is used on PCs. There are price breaks for educators on this software.
<http://www.tech4learning.com/frames>

Animation Planning Worksheet

Step One: Research

What is the subject?

Who is the audience?

What is the purpose of the animation?

How long will the animation be?

Step Two: Concept

Give a brief summary of the story and draw out the action using the provided storyboard.